REMARKS

The Examiner is also thanked for the allowance of Claims 3-7, 14, 23-27, 30-34, and 41.

By this amendment, Claims 1, 8, 15, 17, 28, and 35 have been amended. No claims have been added. Claims 42 and 43 have been cancelled. Hence, Claims 1-41 are pending in the application.

SUMMARY OF THE REJECTIONS/OBJECTIONS

Claims 1-2, 8-10, 15-19, 28-29, and 35-37 have been rejected under 35 U.S.C. § 102(b) as allegedly anticipated by the published patent application WO 91/03024 by Masden et al. ("*Masden*"). Claims 11-13, 20-22, 38-40, and 42-43 are objected to as being dependent upon a base claim, but would be allowable if recited in independent form.

The rejections are respectfully traversed.

CLAIMS 1-2, 8-10, 15-16, 17-19, 28-29, AND 35-37 ARE PATENTABLE OVER

MASDEN

Each of the pending claims are patentable over the cited art as each claim features subject matter that is not disclosed, taught, or suggested by the cited art. It is respectfully submitted that each of the pending claims is patentable over *Masden*.

Claim 1 is patentable over *Masden*

Claim 1 features the elements of:

"sending, from a requestor to a master of the resource, a lock mode request for a lock mode on the resource;
receiving the resource at the requestor from a holder of the resource, wherein the holder of the resource is separate and distinct from the master of the resource; and
accessing the resource as if the requestor had been granted the lock mode without waiting to receive an express lock mode grant from the master." (emphasis added)

One or more of the above-quoted elements is not disclosed, taught, or suggested by *Masden*.

There are significant differences between the approach of the pending claims and the approach of *Masden*. The pending claims are directed towards increasing performance in transferring data items in a multi-node system. According to the approach of Claim 1, a requestor sends a lock mode request for a lock mode on a resource to a master. The requestor receives the resource from a holder from the resource. Importantly, the holder of the resource is separate and distinct from the master of the resource. The requestor accesses the resource as if the requestor had been granted the lock mode without waiting to receive an express lock mode grant from the master. Advantageously, the requestor may access the resource with greater speed than if the requestor had to wait to receive an express lock mode grant from the master.

In an approach of *Masden* cited by the Office Action to show Claim 1 (referred to herein as the "shared mode" approach, see *Masden* page 6, line 20 – page 7, line 8), a group of workstations, each operating in a shared mode, may request files from a file server. To request a file from the file server, a particular workstation issues requests to the file server to open and lock a file. If the open request and the lock request are granted, then the workstation may thereafter modify the file. The workstation transmits the updated file to the file server. The workstation may then issue a request to the file server to unlock and close the file. In the shared mode, as many as eight messages may be communicated between a workstation and the file server. To prevent files from becoming inconsistent, the file server locks the files when the files are being modified by a particular workstation. Significantly, the shared mode approach only involves two entities, namely a file server and a workstation.

The position of the Office Action relies upon the workstation being analogous to the requester, and the file server being analogous to both the master of the resource and the holder of the resource. For example, the Office Action argues that the element of "sending, from a requestor to a master of the resource, a lock mode request for a lock mode on the resource" is shown by a workstation issuing "requests to the file server to open and lock files or records resident on the file server" (see Page 6, lines 25-28).

However, Claim 1 features the element of "receiving the resource at the requestor from a holder of the resource, wherein the holder of the resource is separate and distinct from the master of the resource." The portion of *Masden* cited to show this element (page 6, lines 28-30) states, *in toto*, "the file server responds by verifying the transaction and sending the requested data back to the workstation." Thus, in the position of the Office Action, the file server is both the master of the resource and the holder of the resource, which directly conflicts with the requirement that the holder of the resource be separate and distinct from the master of the resource. Thus, the cited portion of *Masden* cannot disclose, teach, or suggest the above-cited element.

Consequently, as at least one element of Claim 1 is not disclosed, shown, or suggested by *Masden*, it is respectfully submitted that Claim 1 is patentable over *Masden* and is in condition for allowance.

Claim 8 is patentable over *Masden*

Claim 1 features the elements of:

> "receiving, at a master, a request message which indicates that a requestor needs a particular resource of a plurality of resources, where the master maintains a plurality of lock mode records corresponding to the plurality of resources;
> <u>sending, from the master to a holder, an inform lock holder message to indicate to the holder that the requestor needs the particular resource and to identify the requestor to the holder to allow the holder to send the particular resource directly to the requestor;</u>
> receiving a lock access message from the requestor where the lock access message indicates that the requestor has assumed a lock mode relative to the particular resource; and
> performing an update to a particular lock mode record of the plurality of lock mode records in response to receiving the lock access message, wherein the update indicates that the requestor has assumed the lock mode on the particular resource." (emphasis added)

One or more of the above-quoted elements is not disclosed, taught, or suggested by *Masden*.

According to the approach of Claim 8, a request message that indicates that a requestor needs a particular resource is received. The master sends, to a holder, an inform lock holder message to indicate to the holder that the requestor needs the

particular resource and to identify the requestor to the holder to allow the holder to send the particular resource directly to the requestor. A lock access message that indicates that the requestor has assumed a lock mode relative to the particular resource is received. An update to a particular lock mode record is performed in response to receiving the lock access message.

In an approach of *Masden* that is cited by the Office Action to show elements of Claim 8 (referred to herein as the "OPlock" approach, see *Masden* page 7, line 28 – page 8, line 24), a file server automatically interprets a request from a workstation for a shared mode lock on a file as a request for an opportunistic exclusive mode lock (OPlock) on the file. By doing so, the file server (a) grants a conventional exclusive mode lock on the file if no other workstation currently has a lock on the file and (b) grants a shared mode lock on the file if another workstation currently has a lock on the file. If another workstation requests a lock on the same file on which another workstation has been granted an OPlock, then the file server sends a message to the workstation granted the OPlock to cause that workstation to return the presumably updated file to the file server and to revert to a shared lock on the file. Importantly, the identity of the workstation requesting the lock on the file is never communicated to the workstation granted the OPlock.

There are clear distinctions between the approach featured in Claim 8 and both the shared mode approach and the OPlock approach. No portion of *Masden* discloses, teaches, or suggests the element of "sending, from the master to a holder, an inform lock holder message to indicate to the holder that the requestor needs the particular resource and to identify the requestor to the holder to allow the holder to send the particular resource directly to the requestor" featured in Claim 8. The portion of *Masden*, cited to show this element (discussing the OPlock approach, page 8, lines 20-24) merely states, *in toto*, "however, if another workstation requests file services on an Oplocked file, the file server sends a message to the workstation currently owning the file to return the updated file to the file server and to revert to a sharing mode." The cited portion of *Masden* lacks any suggestion of sending, from the master to a holder, a message to indicate to the holder that the requestor needs a particular resource and to identify the requestor to the holder to allow the holder to send the particular resource directly to the requestor. At best, the cited portion suggests a message that informs the recipient (a) the recipient is to return a

file to the file server, and (b) the recipient should revert to a sharing mode. However, nothing in the cited portion suggests identifying to the recipient of the message the identity of the requestor to the holder to allow the holder to send a resource to the holder. Consequently, this element is not disclosed, taught, or suggested by the cited art.

Consequently, as at least one element of Claim 8 is not disclosed, shown, or suggested by *Masden*, it is respectfully submitted that Claim 8 is patentable over *Masden* and is in condition for allowance.

Independent Claims 15, 17, 24, 28, 30, and 35 are patentable over *Masden*

Claim 15 includes limitations similar to Claim 1, except in the context of a system. Claim 28 includes limitations similar to Claim 1, except in the context of a computer-readable medium. It is therefore respectfully submitted that Claims 15 and 28 are each patentable over *Masden* for at least the reasons given above with respect to Claim 1.

Claim 17 includes limitations similar to Claim 8, except in the context of a system. Claim 35 includes limitations similar to Claim 8, except in the context of a computer-readable medium. It is therefore respectfully submitted that Claims 17 and 35 are each patentable over *Masden* for at least the reasons given above with respect to Claim 8.

Dependent Claims 2, 9, 10, 16, 18, 19, 29, 36, and 37 are patentable over *Masden*

Claims 2, 9, 10, 16, 18, 19, 29, 36, and 37 are dependent claims, each of which depends (directly or indirectly) on one of the claims discussed above. Each of Claims 2, 9, 10, 16, 18, 19, 29, 36, and 37 is therefore allowable for the reasons given above for the claim on which it depends. In addition, each of Claims 2, 9, 10, 16, 18, 19, 29, 36, and 37 introduces one or more additional limitations that independently render it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.
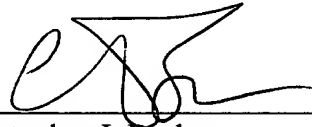
CONCLUSION

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any fee shortages or credit any overages Deposit Account No. 50-1302.

Respectfully submitted,
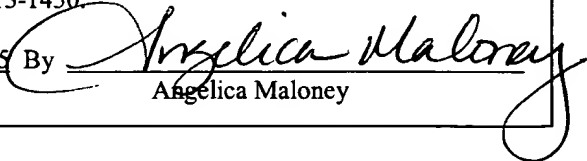
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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the Unit States Postal Service as first class mail in an envelope addressed to: **Mail Stop Amendment**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

On February 15, 2005 By _____
Angelica Maloney